#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Rte: 80 PM: 13.2/13.9 Cty: SF

> File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000803 Address: 333 Burma Road **Date Inspected:** 02-Nov-2007

City: Oakland, CA 94607

OSM Arrival Time: 600 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Benicia, Ca.

**CWI Name:** William Norris **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** PQR test

#### **Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector arrived at the Ironworkers Apprenticeship Training Facility and witnessed welding of a Procedure Qualification (PQR) test plate designated ABF-PQR-003-2-A, using self shielded flux cored arc welding (FCAW) using NR 232, class E71T-8 electrode, 0.072 in. diameter. The welding was conducted with the support of a track guided "Bug O" system in the 4G (overhead) position. The welding was performed per the AWS D1.5, 2002 Section 5.13 requirements. The Smith Emery QC inspector, Mr. William Norris recorded the preheat and interpass temperatures, the average amperage, voltage and the travel speed for all weld passes. The QA inspector observed that the welder Mr. Daniel Gordon made minor repairs to the first pass, the fourth pass and the fifth pass due to issues with the track guided "Bug O" system and or the filler metal. QA inspector observed that the welder Mr. Daniel Gordon partially removed the third and seventh passes using a manual air-carbon arc gouging system to maintain the joint geometry for the following pass. After the air-carbon arc cutting was complete, the weld groove was ground. The welding of this plate was completed on this date. The QA inspector noted that the welding appeared to comply with the contract documents. Pictures are on file.

### **Summary of Conversations:**

At the start of welding the QC inspector reported that the Procedure Qualification test was to be performed in accordance with AWS D1.5-2002 section 5.13 production procedure specification and the minimum heat input would be used. At the completion of the welding the QC inspector Mr. Morris reported that the test plate visual inspection would be performed at a later date. Mr. Morris also reported that no work would be performed on Monday, 11/05/2007.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

# WELDING INSPECTION REPORT

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remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Lanz,Joe	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer